

Indiana bat was discovered in 1999 in the Cheoah Ranger District of Nantahala National Forest in Graham County (USFWS 1999). This location is more than 100 miles west of the study area. No known occurrence of Indiana bat has been reported within the project vicinity.

Dwarf-flowered Heartleaf

Dwarf-flowered heartleaf is a low-growing, spicy-smelling, evergreen perennial herb that spreads via rhizomes. Leaves are heart-shaped, alternate, leathery, entire, and 1.6 to 2.4 inches long and wide (USFWS 2002a). Each leaf is supported by a long, thin petiole that rises directly from the subsurface rhizome. The solitary flowers are fleshy, firm, grow at the end of short stalks, and are often under forest litter and leaves near the base of the leaf petioles.

Dwarf-flowered heartleafs grow in acidic, sandy loam soils and along bluffs and nearby slopes, in boggy areas adjacent to creek-heads and streams, and along the slopes of hillsides and ravines. The species is usually found on Pacolet, Madison gravelly sandy loam, or Musella fine sandy loam soils.

This species is endemic to a nine-county area in the western upper Piedmont of the Carolinas. In North Carolina, occurrences have been recorded in Cleveland, Polk, Rutherford, McDowell, Lincoln, Catawba, Burke, Caldwell and Alexander counties. The species appears to be more common than originally thought, although most populations occur on private lands.

Suitable habitat is present within the study area and one previously undocumented population of dwarf-flowered heartleaf was identified within the project study area.

Small whorled pogonia

The small whorled pogonia is a perennial orchid with a stout, hollow stem. The leaves are elliptical in shape and measure up to 3 inches by 5 inches.

The habitat of the small whorled pogonia varies widely throughout its range, although there are a few common characteristics among the majority of sites. These include sparse to moderate ground cover; a relatively open understory; and proximity to features that create extensive, stable breaks in canopy, such as logging roads or streams. The pogonia can be found in mature forests as well as stands as young as 30 years old.

Field surveys conducted in 2003 found appropriate habitat for this species in several areas within the study area; however, no individuals of this species were located. No known recent occurrence of small whorled pogonia has been reported by the NC Natural Heritage Program in the project vicinity.